AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1-10. (Canceled).

11. (New) Modified human factor VIII cDNA, wherein at least one replacement of a first codon of wild-type human factor VIII cDNA is made, said first codon encoding a differently charged amino acid than the corresponding amino acid of the porcine factor VIII, and wherein said at least one replacement is chosen from:

(a) a first codon encoding a neutral amino acid is replaced with a second codon that encodes an amino acid with the same charge as the corresponding porcine factor VIII amino acid; and

(b) a first codon encoding a charged amino acid is replaced with a second codon that encodes an amino acid that is neutral or the same charge as the corresponding porcine factor VIII amino acid.

12. (New) The modified human factor VIII cDNA of claim 11, wherein the B-domain is partially or completely deleted.

13. (New) The modified human factor VIII cDNA of claim 12, wherein the deleted B-domain, or segment thereof, is replaced by a DNA linker segment.

14. (New) The modified human factor VII cDNA of claim 11, further comprising at least one transcriptional regulatory element.

15. (New) The modified human factor VII cDNA of claim 14, wherein the at least one transcriptional regulatory element is a dominant selectable marker.

16. (New) A composition comprising the modified human factor VIII cDNA of claim 11 and a pharmaceutically acceptable carrier.

17. (New) A recombinant vector comprising the modified human factor VIII cDNA of claim 11.

18. (New) A recombinant host cell comprising the recombinant vector of claim 17.

19. (New) A recombinant host cell comprising the modified human factor VIII cDNA of claim 11.

20. (New) Modified human factor VIII cDNA, wherein at least one replacement of a first codon of a wild-type human factor VIII cDNA is made, said first codon encoding a differently charged amino acid than the corresponding amino acid of a mutant human factor VIII, and wherein said at least one replacement is:

(a) a first codon encoding a charged amino acid is replaced with a second codon that encodes an amino acid of the opposite charge as the corresponding mutant human factor VIII amino acid.

21. (New) The modified human factor VIII cDNA of claim 20, wherein the B-domain is partially or completely deleted.

22. (New) The modified human factor VIII cDNA of claim 21, wherein the deleted B-domain, or segment thereof, is replaced by a DNA linker segment.

23. (New) The modified human factor VIII cDNA of claim 20, further comprising at least one transcriptional regulatory element.

24. (New) The modified human factor VIII cDNA of claim 23, wherein the at least one transcriptional regulatory element is a dominant selectable marker.

25. (New) A composition comprising the modified mutant human factor VIII cDNA of claim 20 and a pharmaceutically acceptable carrier.

26. (New) A recombinant vector comprising the modified mutant human factor VIII cDNA of claim 20.

27. (New) A recombinant host cell comprising the recombinant vector of claim 26.

28. (New) A recombinant host cell comprising the modified mutant human factor VIII cDNA of claim 20.

29. (New) A method of producing a modified human factor VIII protein, comprising:

culturing the host cell of claim 19 or 28 in cell suspension or on a solid support, as a bath cell culture or as a perfusion cell culture with continuous production of a conditioned medium; and

purifying said protein by chromatographic methods.

30. (New) The modified factor VIII protein produced by the method of claim 29.

31. (New) A method of treating hemophilia A, comprising administering the modified human factor VIII cDNA of claim 11 or 20 to at least one patient, and

increasing or maintaining the plasma half-life of the activated, modified human factor VIII protein compared to wild-type human factor VIII protein.

32. (New) The method of treating hemophilia A as claimed in claim 31, wherein the plasma half-life of the activated, modified human factor VIII protein is more than 3 minutes.

33. (New) A method of treating hemophilia A, comprising administering the modified human factor VIII protein of claim 30 to at least one patient, and increasing or maintaining the plasma half-life of the activated, modified human factor VIII protein compared to wild-type human factor VIII protein.

34. (New) The method of treating hemophilia A as claimed in claim 33, wherein the plasma half-life of the activated, modified human factor VIII protein is more than 3 minutes.

35. (New) A modified human factor VIII protein comprising at least one mutation selected from the group consisting of A284K, D318G, M337R, N340D, D349N, N364D, D403S, E434V, E440K, Q468K, R484S, R489G, R583Q, A599 D, E604Q, and G1948K.